



U.S. Department
of Transportation
**Federal Aviation
Administration**

AIRCRAFT CERTIFICATION STAFF
c/o American Embassy
27, Boulevard du Regent
B-1000 Brussels, Belgium

July 3, 2003

In reply refer to: TAB/ndm:07/03/03:0085:03

Dr. Ing. Giok Djien Go
Pfahlgrabenstraße. 45
D-65510 Idstein
Federal Republic of Germany

Dear Dr. Ing. Giok Djien Go:

This is in reply to your letter of June 24 in which you expressed a number of crashworthiness concerns, requested a point of contact at the Boeing Company, and inquired whether this office could certify your crashworthiness-related patents. Attached to your letter were various documents regarding crashworthiness concerns, information relative to your patented designs, and various reference letters.

The Federal Aviation Administration (FAA) certifies the design and production of aircraft, aircraft engines, and propellers in accordance with procedures contained in 14 Code of Federal Regulations (CFR) Part 21. In certifying a design, the FAA ensures the design complies with airworthiness standards (safety and crashworthiness) appropriate to the product. For large transport airplanes, these standards are contained in 14 CFR 25 (see www.faa.gov/certification/aircraft/ click on 'Transport Airplanes' then click on 'Regulations Part 25'). In certifying products, the FAA uses performance-based safety standards and can not prescribe the use of any specific products, such as your patented systems.

The FAA will change the airworthiness standards if it concludes that it is needed to provide an adequate level of safety and the new standard can be practically implemented by the industry. In the case where implementing a new standard is not practical but the safety need exists, the FAA will conduct research, engineering, and development (R,E&D) to remove these barriers. The FAA will not prescribe the use of any product as a result of its safety R,E&D.

The FAA may also change its airworthiness standards based on sufficient data provided by the public. If you feel the current airworthiness standards pertaining to crashworthiness are insufficient, I recommend that you pursue a petition for rulemaking. The process for petition for rulemaking is outlined in our website (see www.faa.gov/avr/arm/ click on 'How to petition for Exemption or Rulemaking'). The FAA may initiate rulemaking based on compelling arguments but any resultant airworthiness standard will be a performance-based safety standard and will not prescribe any specific product.

The FAA does not certify patents as requested in your letter but we do certify changes to a type design, such as your restraint and rescue systems. In the case of a German citizen or company requesting FAA approval, the bilateral agreement between the United States and Germany would require that a German approval be obtained prior to obtaining FAA approval. Also, there may be additional limitations placed depending on the product being modified. If you wish to pursue design approval and installation of your systems on specific aircraft, I suggest you contact the Luftfahrt – Bundesamt (LBA) at the following address:

Luftfahrt – Bundesamt
Certification / Environmental Protection
Hermann Blenkstraße 26
Postfach 3054
D-38020 Braunschweig
Germany

If you apply for LBA approval, you need to mention that you also seek FAA Supplemental Type Certification (STC) approval. The LBA will require you to provide specific information that will be forwarded to the FAA Aircraft Certification Office that will be assigned to validate the LBA approval and issue a FAA STC.

You can get information on FAA's STC process by going to our website (see www.faa.gov/certification/aircraft/ click on 'Supplemental Type Certificates'). This address has links to two documents that will specifically outline the steps in the STC process: Order 8110.4B, Type Certification, and AC 21-40, Application Guide for Obtaining a Supplemental Type Certificate. The cost associated with developing the data to substantiate a certification is borne by the applicant. Also, while the FAA does not charge a fee for its services, the LBA may charge a fee for its services.

Finally, you may enter into an arrangement with an airplane manufacturer, or seat manufacturer for your seat belt designs. While the airplane manufacturer and seat manufacturer work together to ensure the seat, and its components meet all applicable regulations, the airlines drive the details of these designs. In regard to a Boeing contact, I believe the author of the Boeing letter, dated July 26, 2001, is an appropriate contact point. If you wish a higher level review of your proposal by Boeing refer your correspondence to Mr. James M. Jamieson, Senior Vice President, The Boeing Company, P.O. Box 3999, Seattle, WA 98124-2499.

I hope that this letter provides you with a more complete understanding of how aviation safety standards are developed and how aviation products meeting these standards are brought into the international aviation system.

Sincerely,



Thomas A. Boudreau,
Manager, Aircraft Certification Staff
FAA-Brussels